

NWS CHANGE FORM PART A			1. DATE SUBMITTED 27 July 2000 Received 8/3/00	
This form is in three parts. Submitters must complete unshaded blocks in Part A and as much of Part B as possible. WSH will complete Part C (implementation details). If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).				
2. ORIGINATOR OFFICE APO		3. SUBMITTING AUTHORITY Name: Ward Seguin Routing Code: W/APO1		4. COGNIZANT TECHNICAL INDIVIDUAL Name: Bill Carrigg Routing Code: APO Phone: (301) 713-0304x108
5. ORIGINATOR TRACKING NUMBER P431_FSL_A100080				6. SYSTEMS AFFECTED BY CHANGE <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> ASOS <input checked="" type="checkbox"/> AWIPS <input type="checkbox"/> CRS <input type="checkbox"/> NEXRAD <input type="checkbox"/> OTHER (specify) _____ </div> <div> <input type="checkbox"/> DATA PRODUCTS (Complete Data Products Supplement) </div> </div>
7. WSH TRACKING NUMBER <div style="background-color: #e0e0e0; padding: 5px;"> NWS 618 8/14/00 </div>				8. TITLE OF CHANGE The AWIPS Text Store Process performance improvement - α testing
9. TYPE OF CHANGE <input type="checkbox"/> HARDWARE <input checked="" type="checkbox"/> SOFTWARE <input type="checkbox"/> DOCUMENTATION ONLY			10. SITES AFFECTED (Attach Part B, Page 2, if needed) NMT, EAX.	
11. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM (Include problem report reference numbers.) Enhance performance of the AWIPS Text Store Processes. Problems to be corrected include: watches and warning sitting in a long queue with other products, slow triggers, Related DR. 5988.				
12. KNOWN OR PROPOSED SOLUTION (Include source and description of new features or data products.) The solution implements four improvements, detailed in Attachment A. These include sending watches and warning through a parallel decoding path, improved handling of trigger products, larger StdDBDecoder timeout (5 min.), and additional logging of its performance parameters by the TextDBServer.				
13. ALTERNATE SOLUTIONS None.				
14. REQUIRED CHANGE DATE TBD		15. RATIONALE FOR REQUIRED CHANGE DATE (Include proposed priority, if known.) Impact on sites's operational performance.		
CCB/PMC/CMB DECISION				
16. DECISION AUTHORITY LEVEL		<input type="checkbox"/> CCB LEVEL ONLY <input type="checkbox"/> FAST TRACK <input type="checkbox"/> PMC or NWS CMB DECISION REQUIRED		
17. CCB LEVEL DECISION		<div style="display: flex;"> <div style="flex: 1;"> <input type="checkbox"/> APPROVED <input type="checkbox"/> RECOMMEND APPROVAL <input type="checkbox"/> DISAPPROVED </div> <div style="flex: 1; padding-left: 10px;"> SIGNATURE DATE SIGNED </div> </div>		
FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED				
18. PMC OR NWS CMB DECISION		<div style="display: flex;"> <div style="flex: 1;"> <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED </div> <div style="flex: 1; padding-left: 10px;"> SIGNATURE DATE SIGNED </div> </div>		

NWS CHANGE FORM PART B		1. ORIGINATOR TRACKING NUMBER P431_FSL_A100080	
All RC/ECP submissions must also address the following information. Indicate if any areas are unknown or do not apply. State why information is unknown and when it will be available. Attach extra pages if necessary, referencing each applicable subject.		2. WSH TRACKING NUMBER NWS 618	
FUNDING INFORMATION			
Estimate costs and indicate known sources of funding. (Include travel time, installation time, administrative time, and software development time when applicable.)		3. SOURCE OF FUNDING	4. TOTAL COST \$
5. DEVELOPMENT COSTS (Estimate development costs) Covered under O&M costs.			AMOUNT
6. OPERATIONAL TEST AND EVALUATION COSTS (Estimate test and evaluation costs) N/A			AMOUNT
7. PRODUCTION COSTS (Include acquisition, kit proofing, spares, delivery, and documentation costs) N/A			AMOUNT
8. COMMUNICATIONS SERVICE/CIRCUITS COSTS (Include installation and recurring costs)			AMOUNT
9. IMPLEMENTATION SUPPORT COSTS (Include travel, installation, and administrative costs) N/A			AMOUNT
9A. LIFE CYCLE SUPPORT COSTS (Less communications service/circuits) N/A			AMOUNT
SUPPORTING INFORMATION AND SCHEDULES Provide detailed information needed to implement the requested change.			
10. DEVELOPMENT STATUS/SCHEDULE (Major milestones such as Start, Beta Test, and OT&E) N/A		11. PRODUCTION STATUS/SCHEDULE (Major milestones such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc.) N/A	
12. IMPLEMENTATION/RETROFIT SCHEDULE N/A		13. FACILITY INFORMATION (Attach facility drawings/plans.) N/A	
14. COMMUNICATIONS INSTALLED (Type required, who will order, and associated hardware required; attach Part B, Page 2, if needed.) N/A		15. COMMUNICATIONS SERVICE/CIRCUITS TO BE REMOVED	
16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES (Include person or organization responsible for obtaining each)		17. COORDINATION OF CHANGE WITH OTHER CHANGES The patch is intended for R4.3.1 sites.	
18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED (Include part, serial, and document numbers. Attach Part B, Page 2, if needed.)		19. STAFF RESOURCE IMPACTS (Skills and workload impact on maintainers, operators, and managers.)	
20. LOGISTICS IMPACTS (Include facilities, maintenance, training, and support equipment impacts.)		21. OPERATIONAL IMPACTS (Include continuity and back up needs and plans.)	
22. ADDITIONAL MAJOR CHANGE ACTIVITIES (Include who will accomplish each of them and staff hours required.) See Attachment A.			

NWS CHANGE FORM PART B - PHYSICAL ITEM AND DOCUMENT IMPACT MATRIX SUPPLEMENT						1. ORIGINATOR TRACKING NUMBER P431_FSL_A100080			
This information is required prior to publication of Engineering Modification Notes and Software Release Notes. List physical items to be replaced and specify any changes in related documentation. (Submitters should complete this information, if known. WSH will assist.)						2. WSH TRACKING NUMBER NWS 618			
3. ITEM NAME, CIRCUIT TYPE, SOFTWARE VERSION, OR SITE LOCATION	4. REMOVE REPLACE MODIFY	5. SUPERSEDED ITEM OR CONFIGURATION		6. SUPERSEDING PART NUMBER OR NEW CONFIGURATION	7. DOC TYPE	8. SUPERSEDED DOCUMENT		9. SUPERSEDING DOCUMENT	
		A. PART NUMBER OR CONFIGURATION	B. SERIAL NUMBER(S) OR COMMENTS			A. IDENTIFIER	B. REV	A. IDENTIFIER	B. REV
N/A									

NWS CHANGE FORM PART C		1. ORIGINATOR TRACKING NUMBER P431_FSL_A100080	
WSH is responsible for Part C, but submitters may complete sections that would help clarify the change requirement or the necessary implementation actions.		2. WSH TRACKING NUMBER NWS 618	
3. CCB COST EVALUATION <div style="display: flex; justify-content: space-between;"> NWS COST \$ FAA COST \$ DOD COST \$ OTHER AGENCY COST \$ (SPECIFY)_____ TOTAL COST \$ </div>			
4. IMPLEMENTATION DOCUMENTS REQUIRED <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Engineering Modification Note <input type="checkbox"/> Software Release Notes <input type="checkbox"/> Other Document (Specify)_____ </div>			
ADDITIONAL IMPLEMENTATION INSTRUCTIONS (e.g., Implementation schedule, parts shipping instructions, equipment disposal procedures, additional documentation required, and status reporting instructions.) Include documentation, data input, notification vehicle, or specific action step required to verify completion of the implementation activity.			
5. IMPLEMENTATION ACTIVITY REQUIRED	6. REQUIRED COMPLETION DATE	7. RESPONSIBLE PERSON AND OFFICE	8. DOCUMENT OR ACTION REQUIRED TO VERIFY COMPLETION
1. The developer will place the software patch on the systems of the alpha sites.	1 August 2000	Thigpen/SST W/APO3	N/A

Attachment A

Changes to the AWIPS Text Store Processes

The changes entail:

1. All W* products (WMO ID starting with a W) are sent to the new WarnDBDecoder process (on as2). This new process is dedicated to handling only warnings transmitted over the SBN and WAN. The WarnDBDecoder only processes W* products and will now route them "around" any queues that may have developed at the StdDBDecoder. Such queues should now have little or no impact on the receipt and storage of the W* products. Further, some efficiency improvements have also been made in the StdDBDecoder which will help to prevent queues from building there. As a result, you should see no entries in the StdDBDecoder log file for W* products.
 2. The new TextDB_Server executable now handles the trigger products differently. The 4.3.1 version will
 - a) call a script to extract a product from the database, then
 - b) call the script listed in fxatextTriggerAction.txt file associated with the product.
- In this new version of TextDB_Server, the script extracting the product has been replaced in the actual TextDB_Server code, substantially reducing the delay of executing a trigger. The second script is still called (as in the 4.3.1 version).
3. The 4.3.1 StdDBDecoder would print a message that a storage failed writing data to the text data base when the TextDB_Server did not respond within 30 seconds. The product was still written into the database. The new StdDBDecoder has changed this timeout period to 5 minutes.
 4. The TextDB_Server now logs the time it takes to store each product and the cumulative count of products stores, as an extension to the existing "NCF_STORE" log message. Some scripts have been developed to use this time for analysis.